ABSTRACT OF THE DISCLOSURE

A DEVICE AND METHOD FOR THE DETERMINATION OF LITHIUM ION CONCENTRATION IN A BIOLOGICAL FLUID

The present invention relates to a novel device and method for the detection of lithium ions in a biological fluid. In a preferred embodiment, the present invention provides a novel compound and a optical sensor which incorporates said compound for the detection of lithium ions. Additionally, the present invention provides a method of detecting lithium ions which comprises placing the novel optical sensor into communication with a biological fluid Once the novel compound of the present invention encounters a lithium ion(s), a fluorescence is generated, the intensity of which is measured and allows for the determination of lithium ion concentration. The present invention provides a medical professional with the ability to selectively determine lithium ion concentration in a biological fluid thereby facilitating the treatment of various diseases, such as manic-depressive illness.